

WHAT IS CLAIMED IS:

1. A game apparatus that is provided to be associated with a display means, and a plurality of players participate and play a game on a display screen displayed on said display means, comprising:

5 a game program storing means for storing a game program;

 an operating means operated by the player;

 a number-of-players detecting means for detecting the number of players who participate in the game;

 a screen dividing means for dividing a display area included in said display screen
10 by the number of the participating players, and forming a plurality of divided areas;

 a game image generating means for generating game images in each of said divided areas allotted to each player based on said game program and an operation from said operating means;

 an evaluating value setting means for setting an evaluating value of each player
15 according to a superiority or inferiority situation of a play content of each player; and

 a size changing means for changing a size of said divided areas allotted to each player based on said evaluating value.

2. A game apparatus according to claim 1, wherein

 said screen dividing means equally divides an area of said display area by said
20 number of the participating players,

 said size changing means changes the area of said divided areas of each player.

3. A game apparatus according to claim 1, further comprising

 a display area rendering means for rendering a circular display area within said display screen; wherein

25 said screen dividing means equally divides said circular display area rendered by

said display area rendering means by said number of the participating players in such a manner that each divided area is rendered an angle that passes the center thereof,

said size changing means changes a center angle of said divided areas of each player.

5 4. A game apparatus according to claim 1, wherein

said game image generating means generates a changed game image according to a size change of said divided areas by said size changing means.

5. A game apparatus according to claim 4, wherein

10 said game image generating means generates the game image in such a manner as to change a visual range.

6. A game apparatus according to claim 1, further comprising

a determining means for determining whether or not there is the player who ends the game out of the participating players; wherein

15 said size changing means re-divides said display area by the number of the remaining players that subtract the players when determined by said determining means that there is the player who ends the game, and determines a size of re-divided areas based on the evaluating value of the remaining players.

20 7. A game system that a plurality of players participate and play a game, and having a video game machine connected to a common display and a plurality of hand-held game machines including a separate display connected via a connecting means, comprising:

an exchanging means for exchanging data between said video game machine and said hand-held game machine; and

25 an evaluating value setting means for setting an evaluating value of each player according to a superiority or inferiority situation of a play content of each player; wherein

said hand-held game machine, includes:

a first game-program storing means for storing a program for a player's own hand-held game;

an operating means operated by the player;

5 a first game-image generating means for generating a separate game image to be displayed on said separate display based on said program for a player's own hand-held game or an operation from said operating means; and

said video game machine, includes:

10 a second game-program storing means for storing an operating program for the video game machine and a program for an interlocking game;

a number-of-players detecting means for detecting the number of players who participate in the game;

15 a screen dividing means for dividing a display area included in a common screen to be displayed on said common display in correspondence with the number of the participating players, and forming a plurality of divided areas;

a second game-image generating means for generating game images in each of said divided areas allotted to each player based the program stored in said second game-program storing means or an operation from said operating means received by said exchanging means; and

20 a size changing means for changing a size of said divided areas allotted to each player based on said evaluating value set by said evaluating value setting means.

8. A game system according to claim 7, wherein

said evaluating value setting means is provided in said video game machine,

25 said first game-image generating means re-generates said separate game images based on the evaluating value of the player received from said video game machine by

said exchanging means.

9. A game apparatus that is provided to be associated with a display means, and a plurality of players participate and play a game on a display screen displayed on said display means, comprising:

- 5 a game program storing means for storing a game program;
- an operating means operated by the player;
- a number-of-players detecting means for detecting the number of players who participate in the game;
- a screen dividing means for dividing a display area included in said display screen
- 10 by the number of the participating players, and forming a plurality of divided areas;
- a game image generating means for generating game images in each of said divided areas allotted to each player based on said game program and an operation from said operating means;
- a determining means for determining whether or not there is the player who ends
- 15 the game out of the participating players; and
- a re-dividing means for re-dividing said display area by the number of the remaining players that subtract the number of players when determined by said determining means that there is the player who ends the game, and allotting the re-divided areas to the remaining players.

20 10. A game system that a plurality of players participate and play a game, and having a video game machine connected to a common display and a plurality of hand-held game machines including a separate display means connected via a connecting means, comprising:

- 25 an exchanging means for exchanging data between said video game machine and said hand-held game machine; wherein

said hand-held game machine, includes:

a first game-program storing means for storing a program for a player's own hand-held game;

an operating means operated by the player;

5 a first game-image generating means for generating a separate game image to be displayed on said separate display based on said program for a player's own hand-held game or an operation from said operating means; and

said video game machine, includes:

10 a second game-program storing means for storing an operating program for the video game machine and a program for an interlocking game;

a number-of-players detecting means for detecting the number of players who participate in the game;

15 a screen dividing means for dividing the display area included in a common screen to be displayed on said common display in correspondence with the number of the participating players, and forming a plurality of divided areas;

a second game-image generating means for generating game images in each of said divided areas allotted to each player based on the program stored in said second game-program storing means or an operation from said operating means received by said exchanging means;

20 a determining means for determining whether or not there is the player who ends the game out of the participating players; and

25 a re-dividing means for re-dividing said display area by the number of the remaining players that subtract the player when determined by said determining means that there is the player who ends the game, and allotting the re-divided areas to the remaining players.

11. A storing medium that stores a game program for changing a plurality of divided areas on a display screen in a game apparatus that is provided to be associated with said display means, and a plurality of players participate in a game and operate an operating means so as to play the game on said display screen displayed on said display means, said game program allows a computer of said game apparatus to execute
5 following steps of:

a number-of-players detecting step for detecting the number of players who participate in the game;

a screen dividing step for dividing the display area included in said display
10 screen by the number of the participating players, and forming said plurality of divided areas;

a game-image generating step for generating game images in each of said divided areas allotted to each player based on an operation from said operating means;

an evaluating value setting step for setting an evaluating value of each
15 player according to a superiority or inferiority situation of a play content of each player;
and

a size changing step for changing a size of said divided areas allotted to each player based on said evaluating value.

12. A storing medium that stores a game program for changing a plurality of
20 divided areas on a common screen in a game system having a video game machine connected to a common display, and a plurality of hand-held game machines including an operating means operated by a player and a separate display connected via a connecting means, and that a plurality of players participate and play the game on said common screen displayed on said common display and a separate screen displayed on said separate
25 display,

said game program allows a computer of said hand-held game machine to execute following steps of:

an operation transferring step for transferring an operation from said operating means to said video game machine; and

5 a first game-image generating step for generating a separate game image to be displayed on said separate display based on the operation from said operating means; and

said game program allows a computer of said video game machine to execute following steps of:

10 an operation receiving step for receiving an operation from said hand-held game machine;

a number-of-players detecting step for detecting the number of the players who participate in the game;

15 a screen dividing step for dividing a display area included in said common screen in correspondence with the number of the participating players, and forming said plurality of divided areas;

a second game-image generating step for generating game images in each of said divided areas allotted to each player based on an operation received by said operation receiving step;

20 an evaluating value setting step for setting an evaluating value of each player according to a superiority or inferiority situation of a play content of each player; and

a size changing step for changing a size of said divided areas allotted to each player based on said evaluating value.

25 13. A storing medium that stores a game program for changing a plurality of

divided areas on a display screen in a game apparatus that is provided to be associated with a display means, and a plurality of players participate in a game and operate an operating means so as to play the game on said display screen displayed on said display means,

5 said game program allows a computer of said game apparatus to execute following steps of:

 a number-of-players detecting step for detecting the number of players who participate in the game;

 a screen dividing step for dividing a display area included in said display
10 screen by the number of the participating players, forming said plurality of divided areas;

 a game-image generating step for generating game images in each of said divided areas allotted to each player based on an operation from said operating means;

 determining step for determining whether or not there is the player who ends the game out of the participating players; and

15 a re-dividing step for re-dividing said display area by the number of the remaining players that subtract the number of the players when determined by said determining step that there is the player who ends the game, and allotting the re-divided areas to the remaining players.

 14. A storing medium that stores a game program for changing a plurality of
20 divided areas on a common screen in a game system having a video game machine connected to a common display, and a plurality of hand-held game machines including an operating means operated by a player and a separate display connected via a connecting means, and that a plurality of players participate and play the game on said common screen displayed on said common display and a separate screen displayed on said separate
25 display,

said game program allows a computer of said game apparatus to execute following steps of:

an operation transferring step for transferring an operation from said operating means to said video game machine; and

5 a first game-image generating step for generating a separate game image to be displayed on said separate display based on the operation from said operating means; and

said game program allows a computer of said video game machine to execute following steps of:

10 an operation receiving step for receiving an operation from said hand-held game machine;

a number-of-players detecting step for detecting the number of players who participate in the game;

15 a screen dividing step for dividing a display area included in said common screen in correspondence with the number of the participating players, and forming said plurality of divided areas;

a second game-image generating step for generating game images in each of said divided areas allotted to each player based on an operation received by said operation receiving step;

20 determining step for determining whether or not there is the player who ends the game out of the participating players; and

a re-dividing step for re-dividing said display area by the number of the remaining players that subtract the number of players when determined by said determining step that there is the player who ends the game, and allotting the re-divided areas to the remaining players.

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